

PAT-NO: JP359221523A  
DOCUMENT-IDENTIFIER: JP 59221523 A  
TITLE: IGNITION DEVICE  
  
PUBN-DATE: December 13, 1984

INVENTOR-INFORMATION:

NAME COUNTRY  
IRIBE, KENTARO  
OKABE, SHUICHI

ASSIGNEE-INFORMATION:

NAME COUNTRY  
ISHIKAWAJIMA HARIMA HEAVY IND CO LTD N/A

APPL-NO: JP58097571  
APPL-DATE: June 1, 1983

INT-CL (IPC): F23Q013/00 , H01S003/00

US-CL-CURRENT: 110/260 , 431/67

ABSTRACT:

PURPOSE: To constantly perform positively automatic ignition and to improve the reliability and prolong the life of use by irradiating laser rays on the surface of an ignition member and heating the same.

CONSTITUTION: For example, if an optical fiber 7 (7A) is placed in a light path, laser rays from a laser oscillator 5 are introduced onto the surface of the tip end of an ignition member 4 through the optical fiber 7 (7A), whereby the surface of an ignition member 4 is heated. After the surface of the ignition member 4 reaches a sufficiently high temperature, switching valves 111 and 121 are opened, and the fuel gas and air are introduced into a burner pipe 10 to produce a gaseous mixture. When the gaseous mixture makes contact with the surface of the ignition member 4, which has reached a high temperature, the gaseous mixture is ignited. After the ignition has been performed, a movable arm 61 is moved whereby an optical fiber 7 (7B) adjacent to the optical fiber 7 (7A) is placed in the light path. Similarly, the ignition is carried out by a burner to which the

optical fiber 7 (7B) is connected. Thus, the ignition of burners is successively performed.

COPYRIGHT: (C)1984,JPO&Japio